



1/21

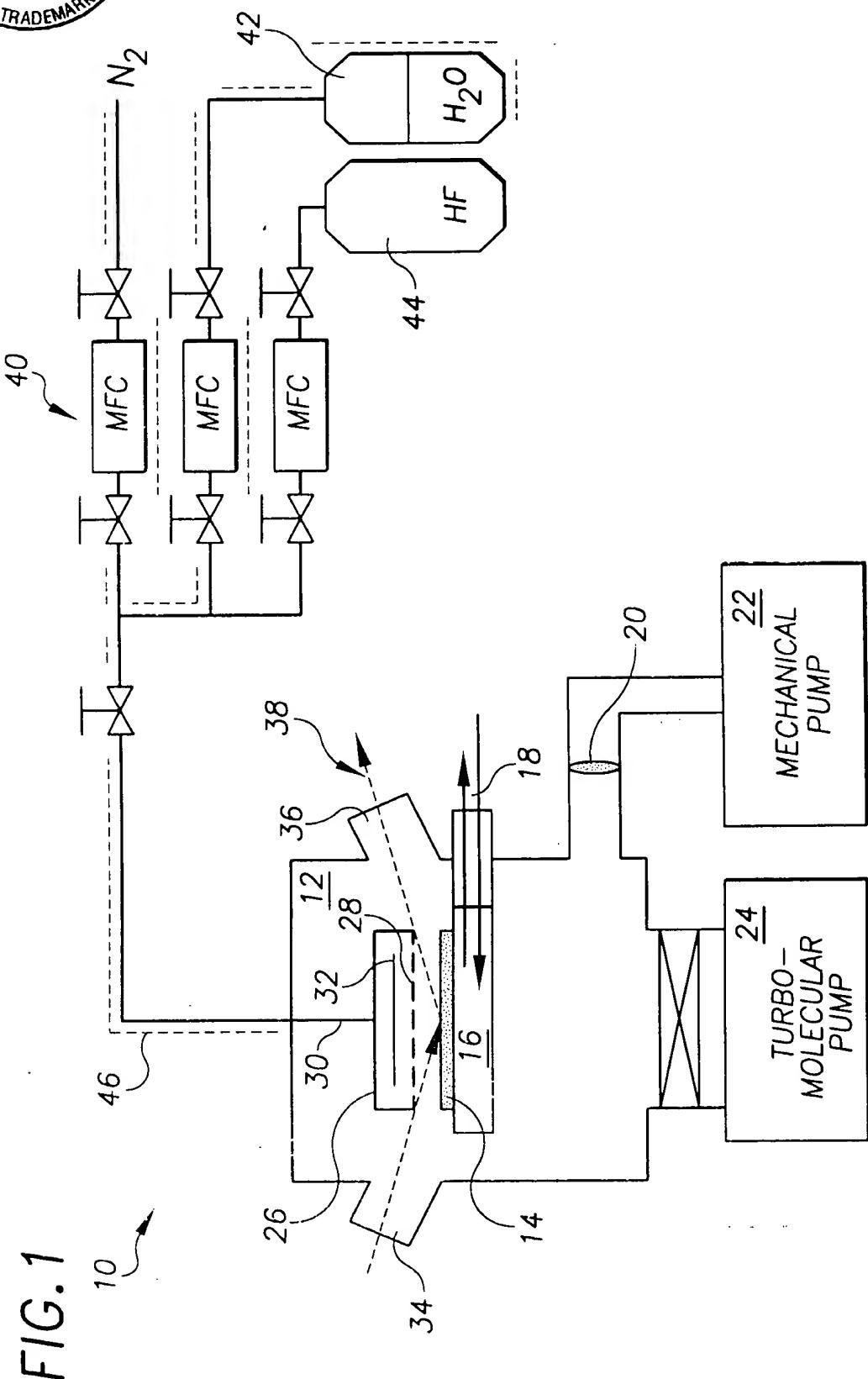
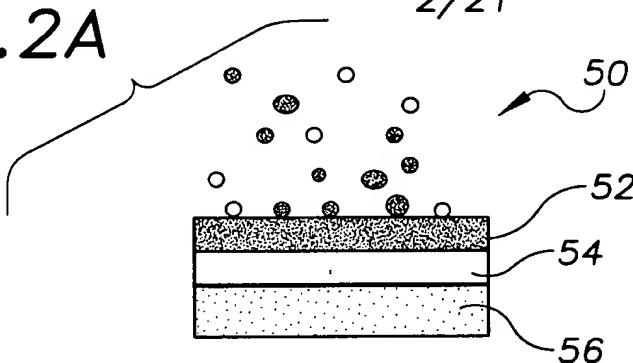




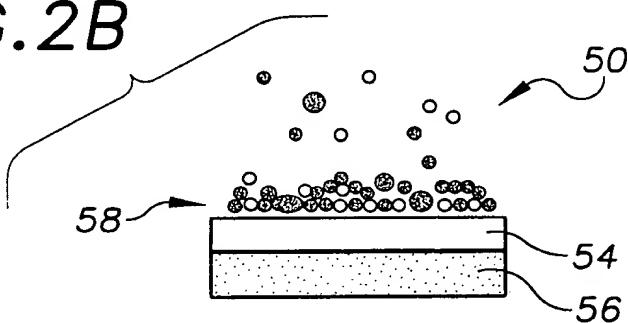
FIG. 2A

2/21



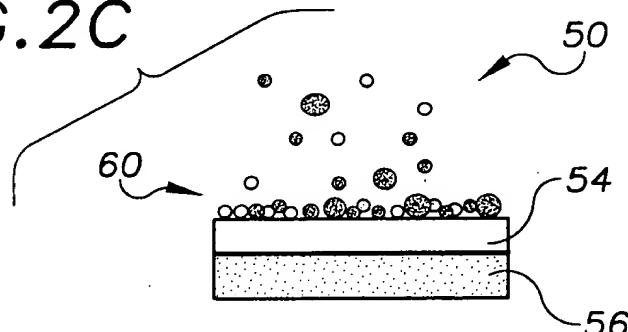
- REACTANTS
- PRODUCTS

FIG. 2B



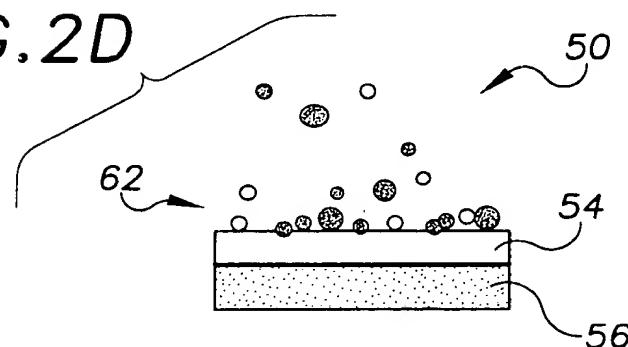
- REACTANTS
- PRODUCTS

FIG. 2C



- REACTANTS
- PRODUCTS

FIG. 2D



- REACTANTS
- PRODUCTS



3/21

FIG. 3A

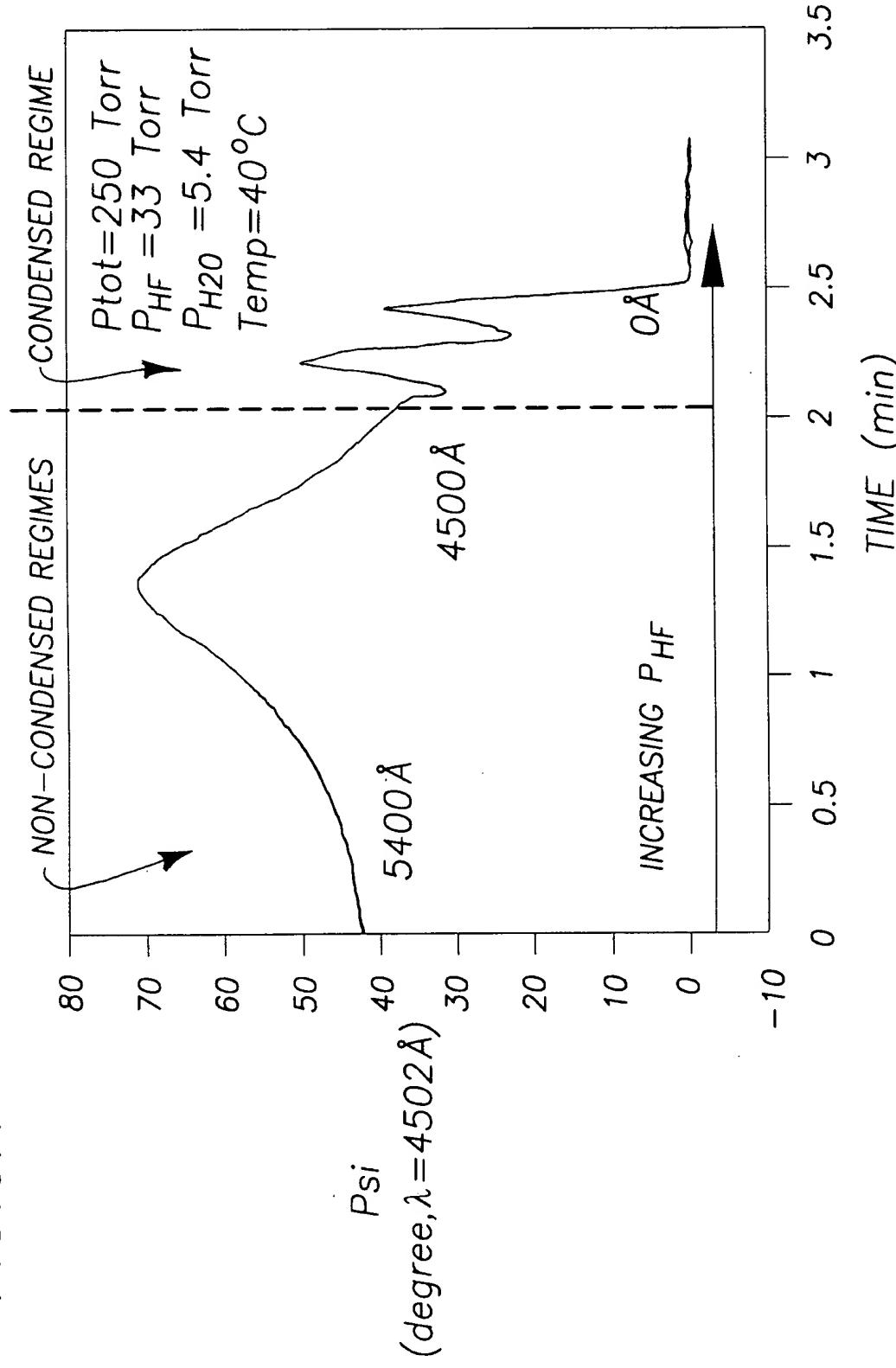


FIG.3B

4/21

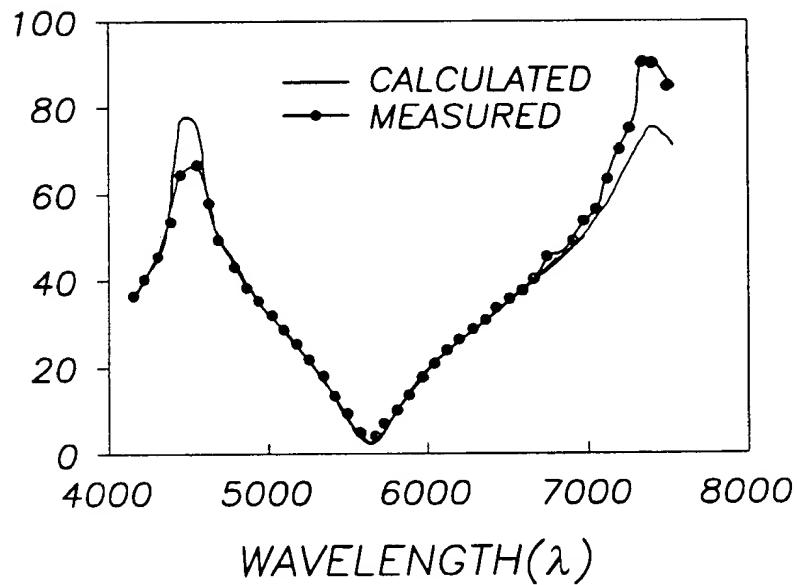
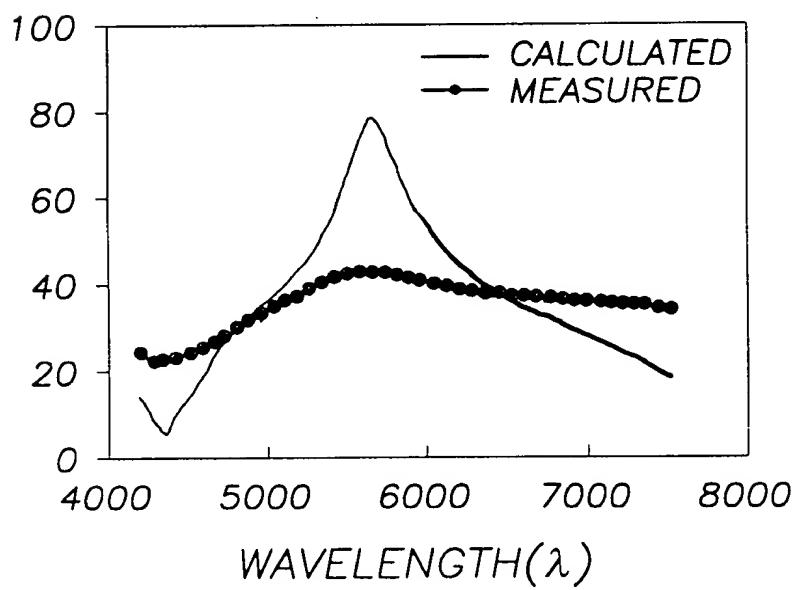
 $\Psi$ (degree)

FIG.3C

 $\Psi$ (degree)

5/21

FIG. 4A



$\Psi$   
(degree,  $\lambda = 4502\text{\AA}$ )

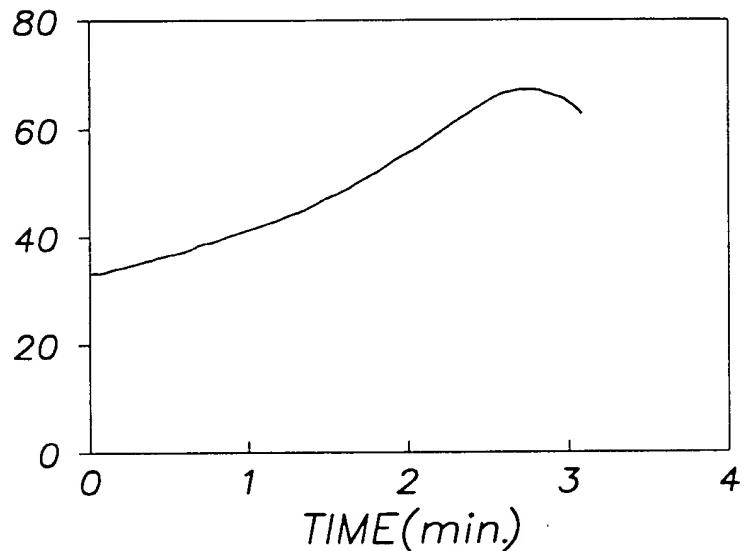
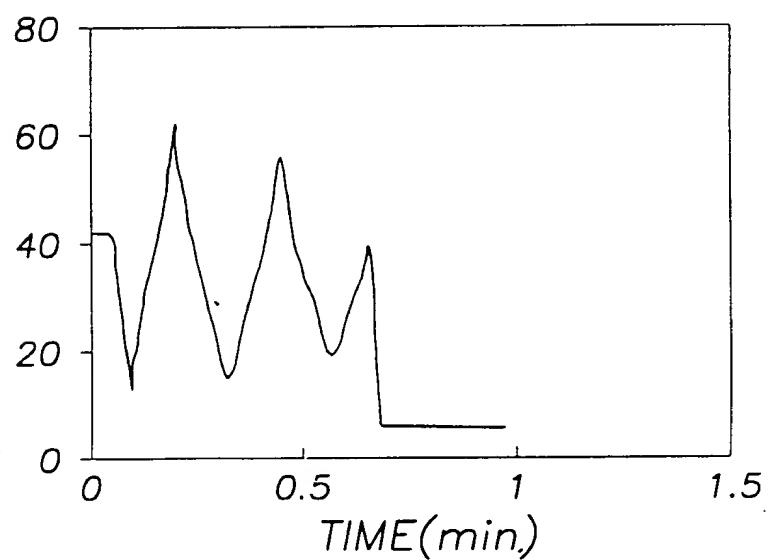


FIG. 4B

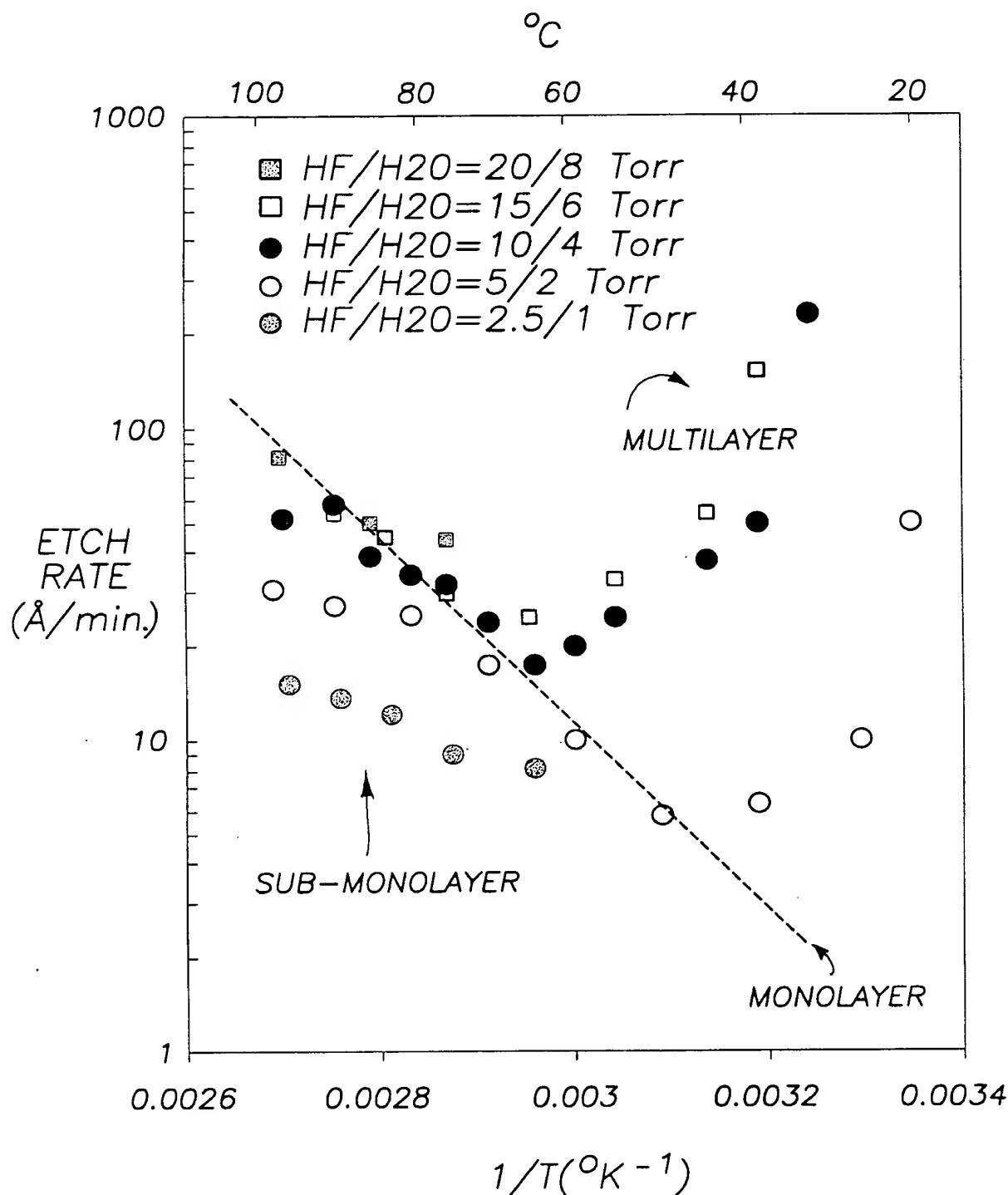
$\Psi$   
(degree,  $\lambda = 4502\text{\AA}$ )





6/21

## FIG.5



7/21

FIG. 6

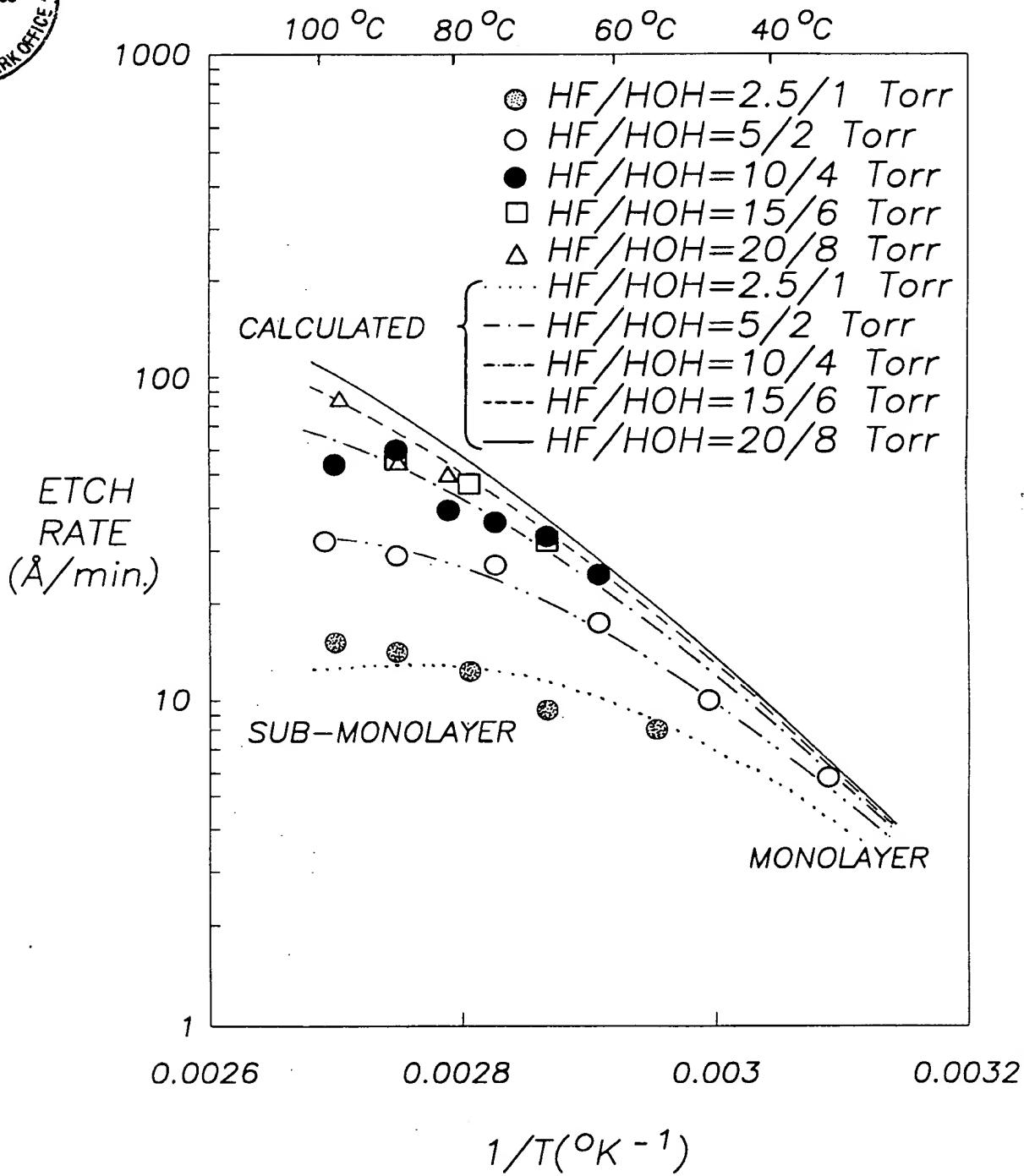


FIG.7A

8/21

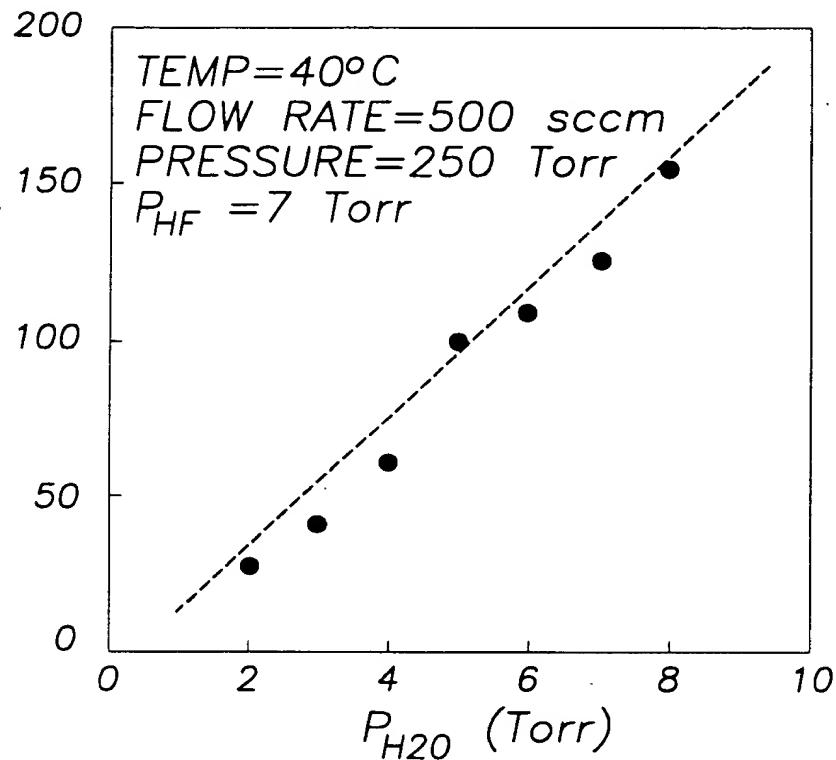
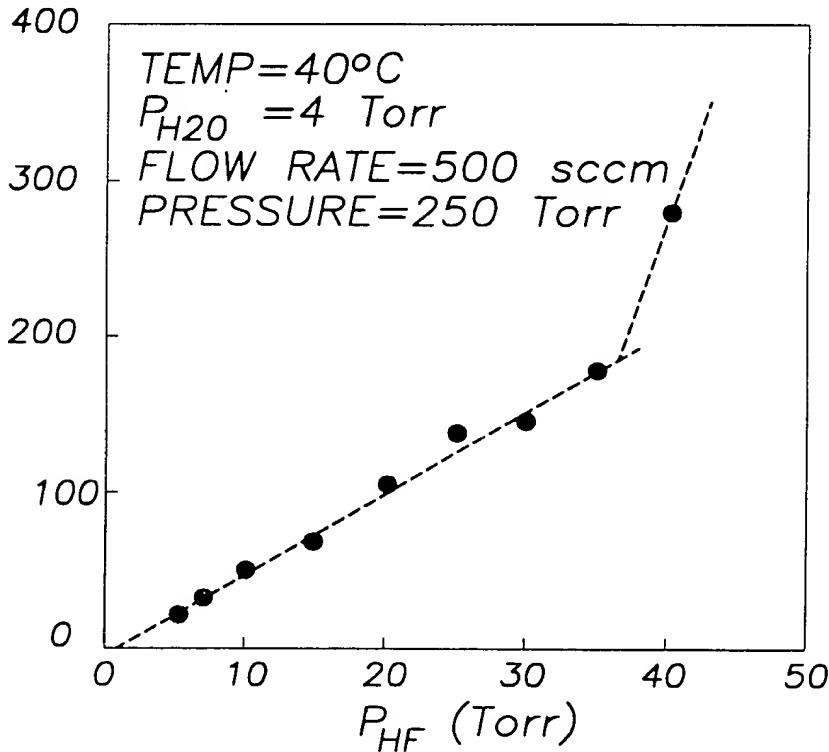
ETCH RATE  
( $\text{\AA}/\text{min.}$ )

FIG.7B

ETCH RATE  
( $\text{\AA}/\text{min.}$ )



9/21

FIG. 8A

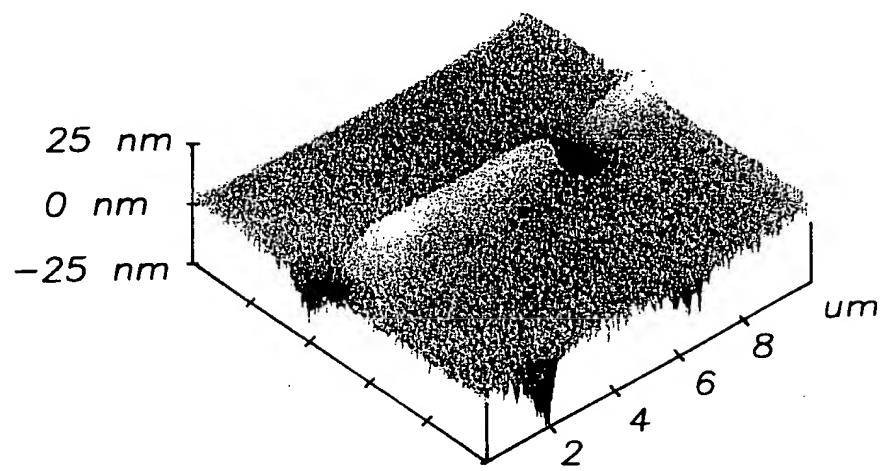


FIG. 8B

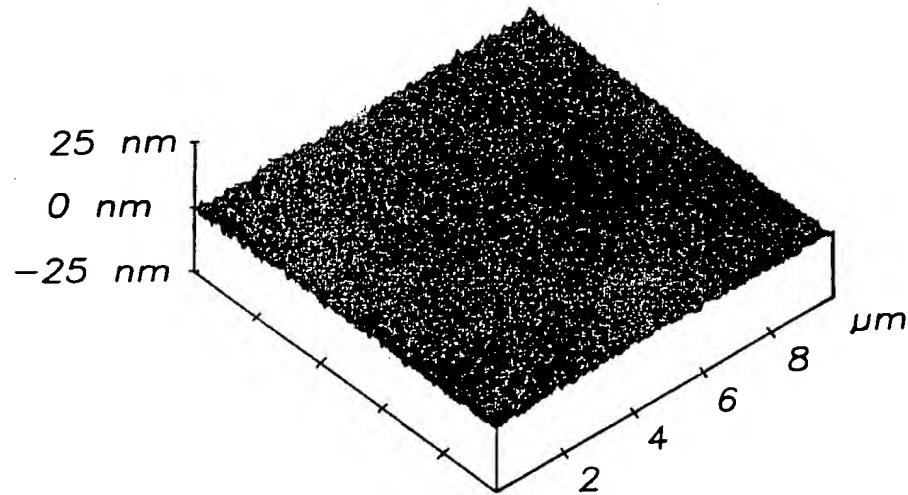


FIG. 9A

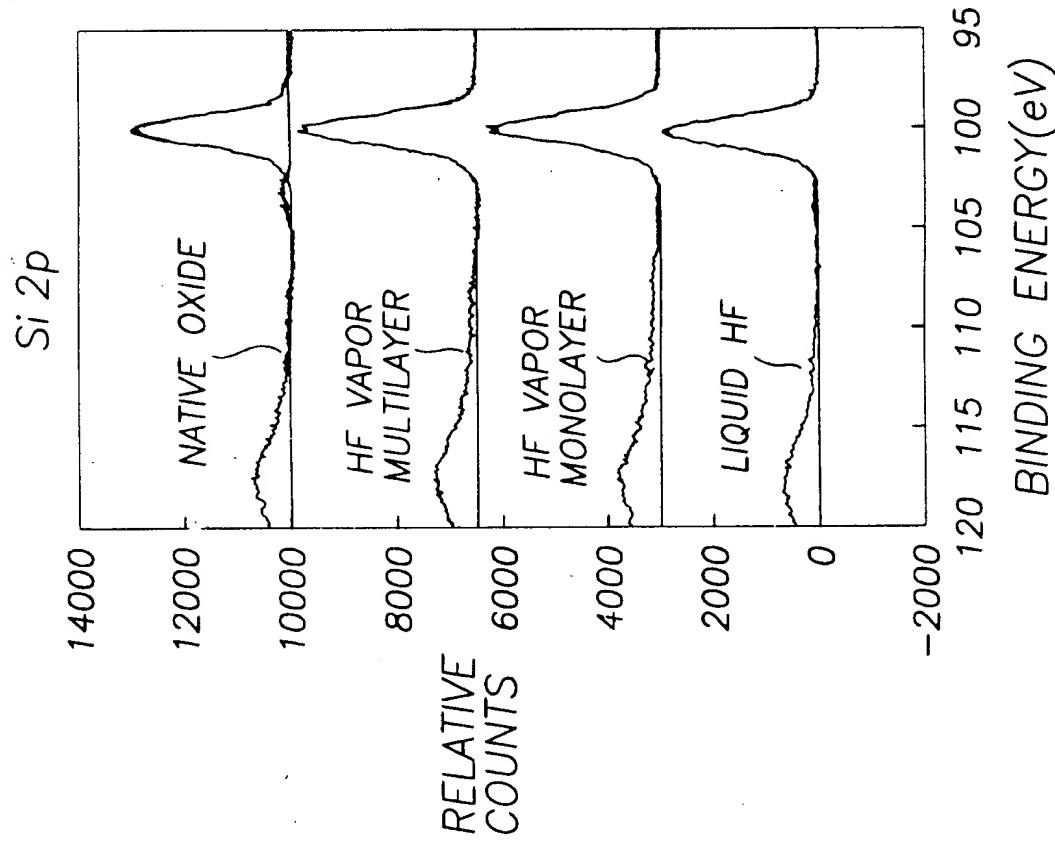
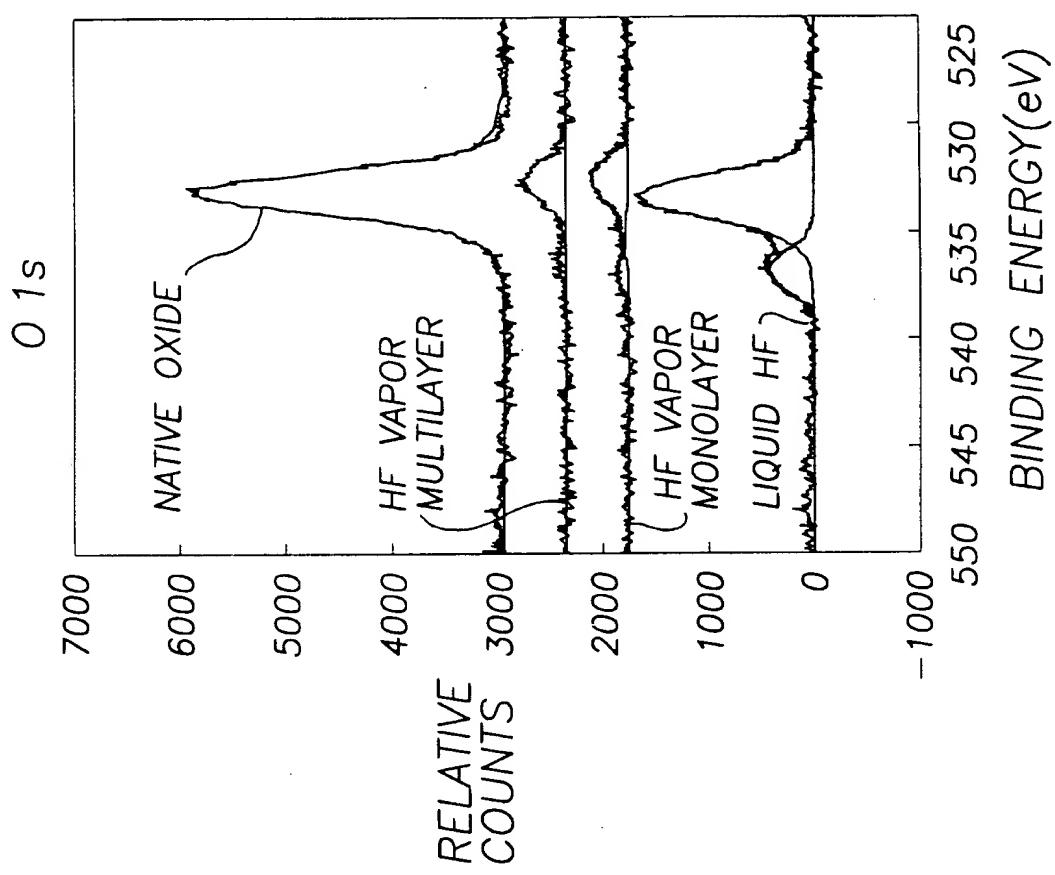


FIG. 9B



10/21

FIG. 9C

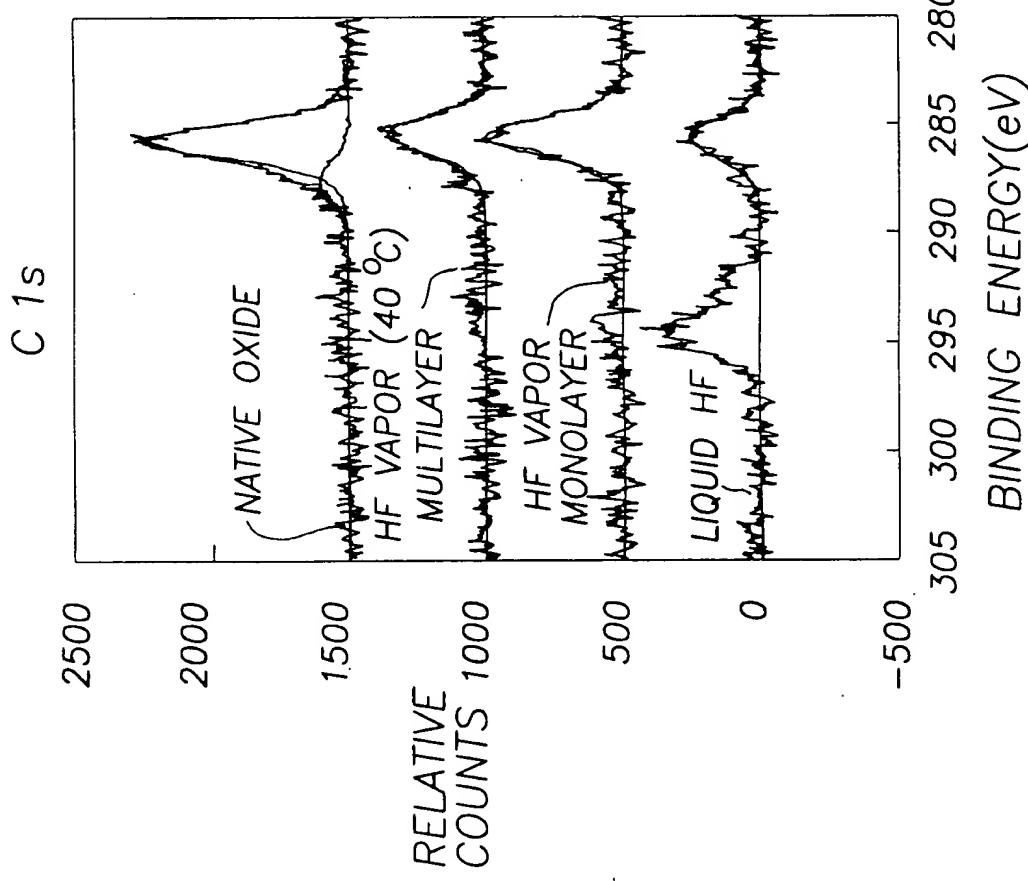
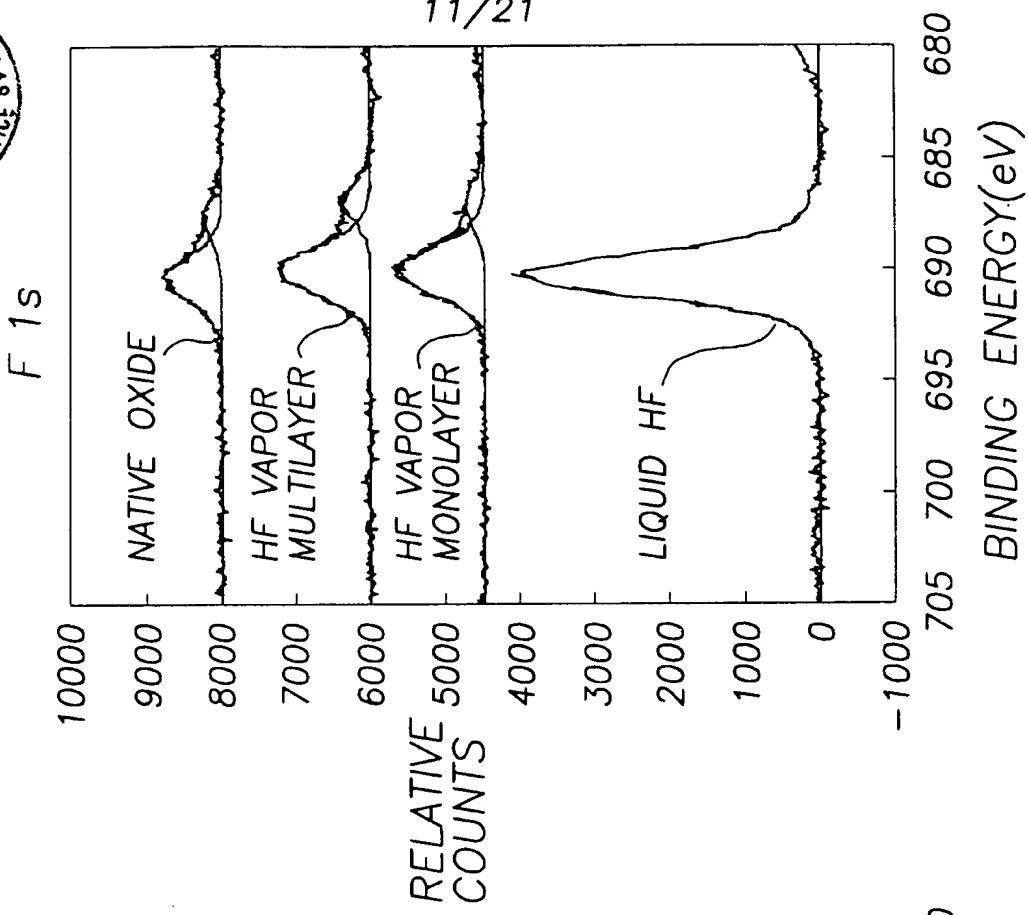
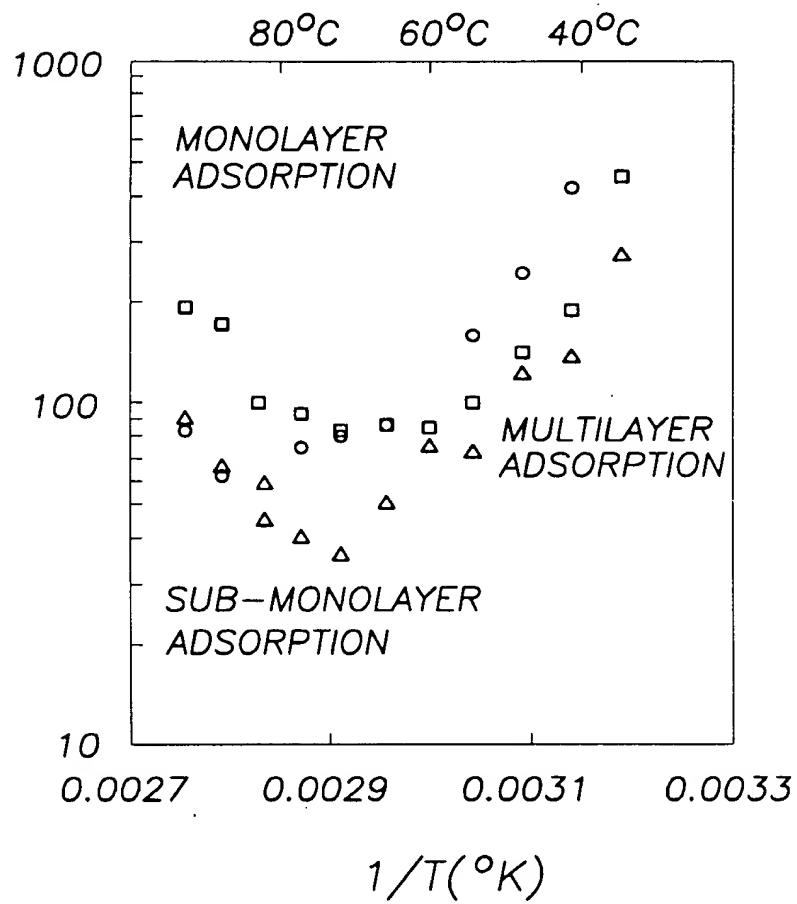


FIG. 9D



12/21

FIG. 10

ETCH RATE  
( $\text{\AA}/\text{min}$ )

△  $\text{HF}/\text{H}_2\text{O} = 5/4 \text{ TORR}$   
□  $\text{HF}/\text{H}_2\text{O} = 10/4 \text{ TORR}$   
○  $\text{HF}/\text{H}_2\text{O} = 10/8 \text{ TORR}$



13/21

FIG. 11A

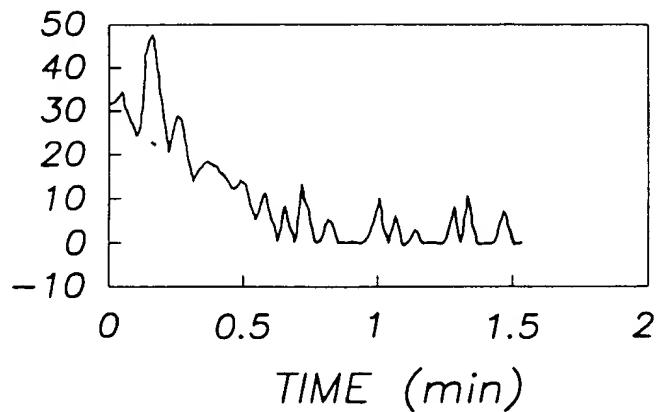
 $\psi(^{\circ})$  AT 4052 $\text{\AA}$ 

FIG. 11B

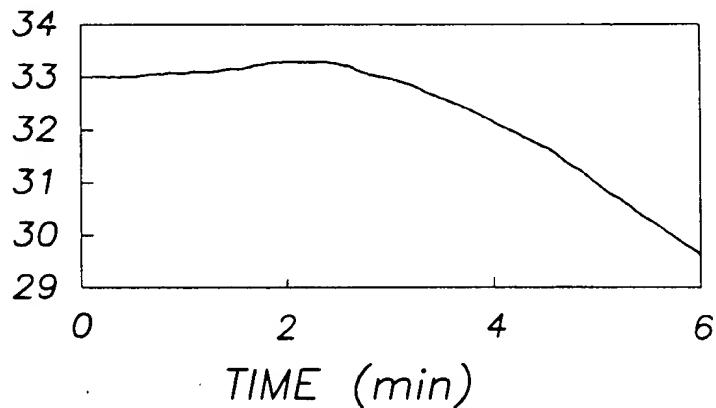
 $\psi(^{\circ})$  AT 4052 $\text{\AA}$ 

FIG. 11C

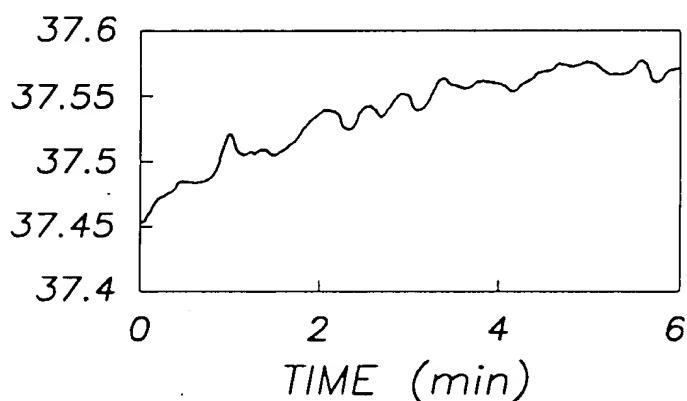
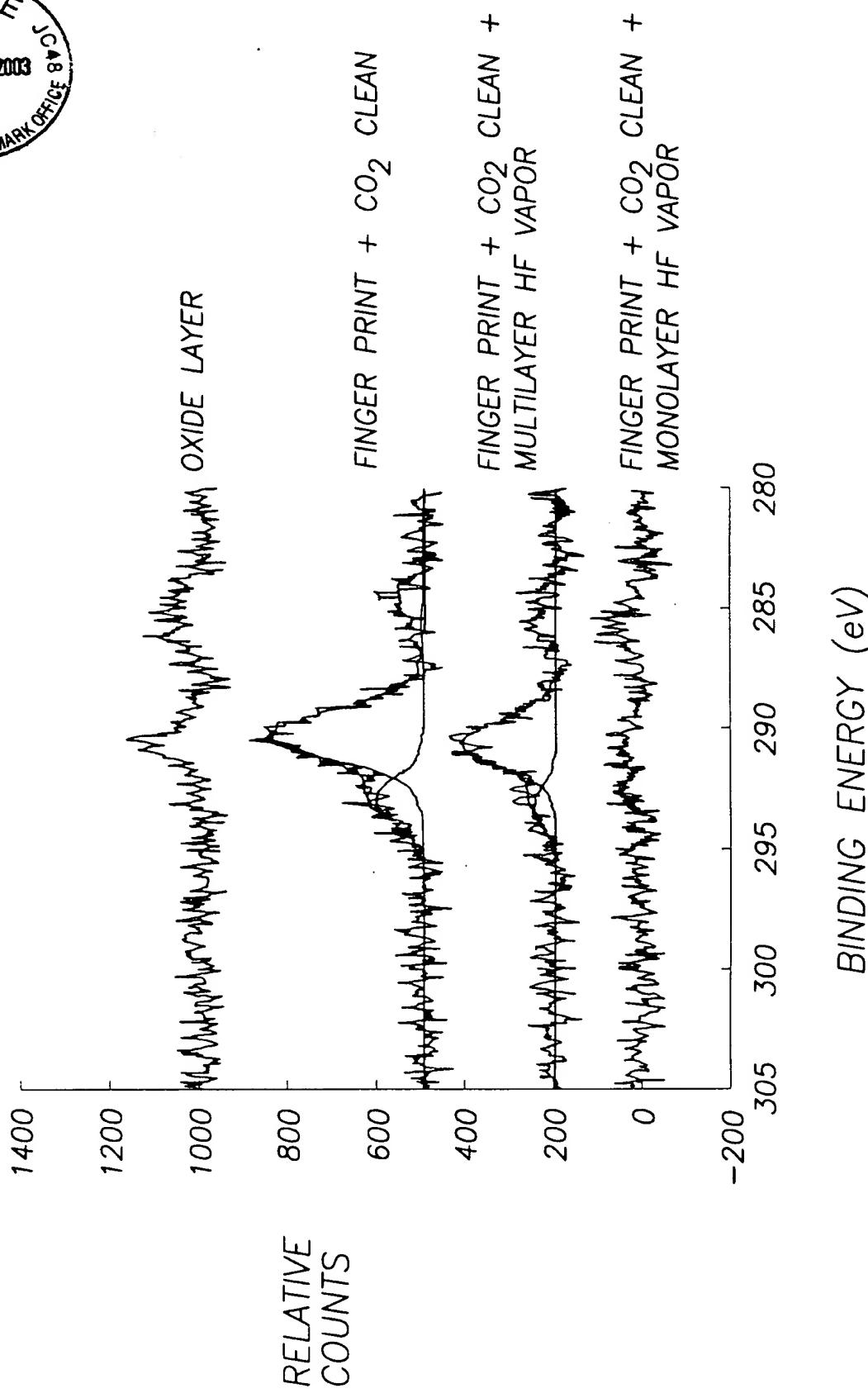
 $\psi(^{\circ})$  AT 4052 $\text{\AA}$ 

FIG. 12

CARBON 1S



14/21





15/21

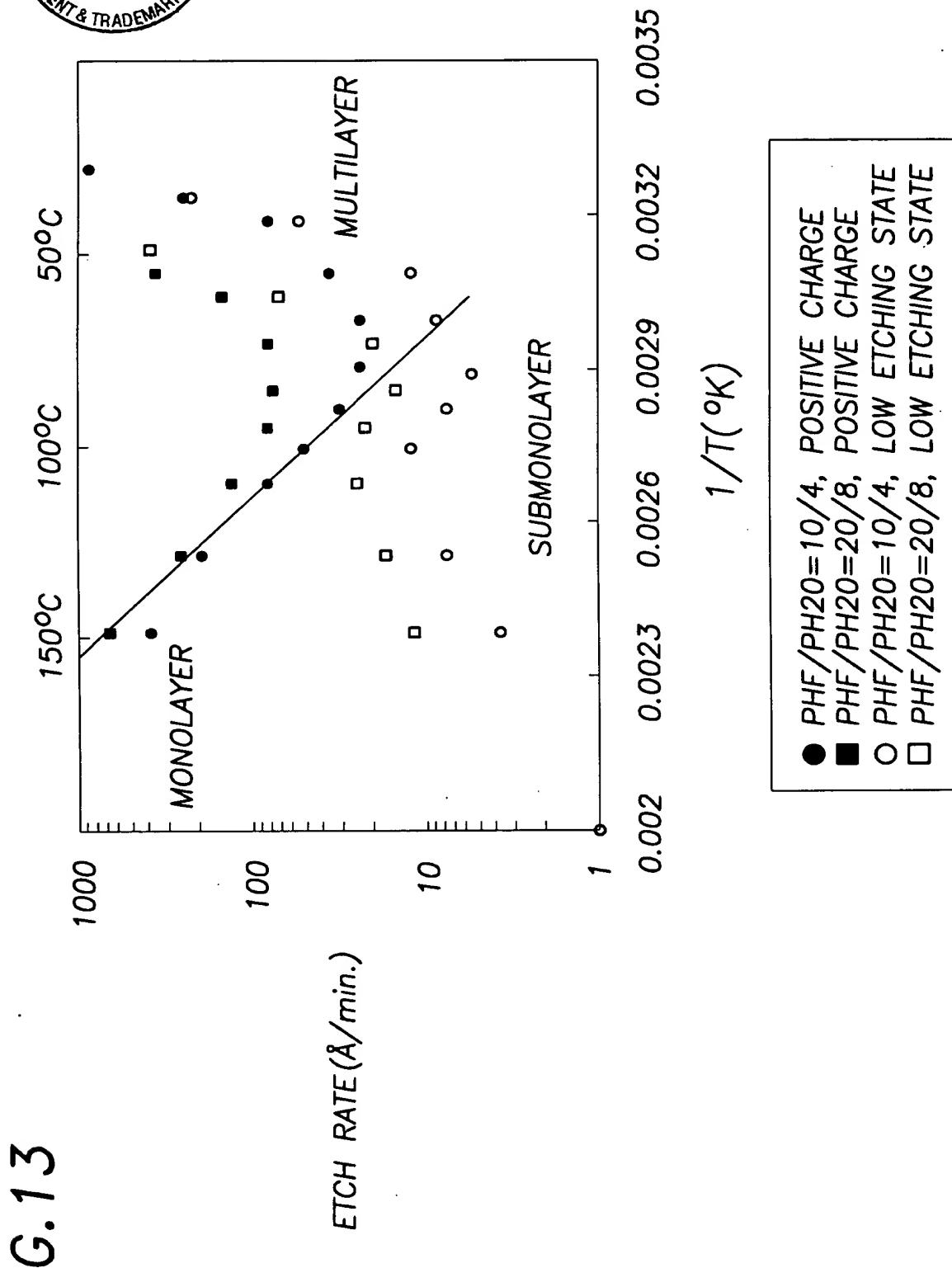


FIG. 14A

16/21

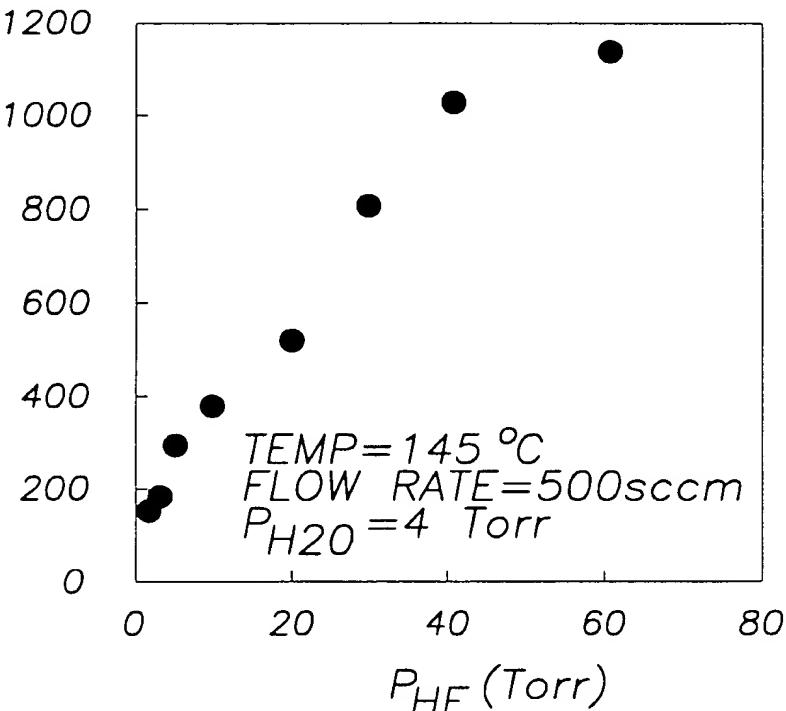
ETCH RATE  
( $\text{\AA}/\text{min.}$ )

FIG. 14B

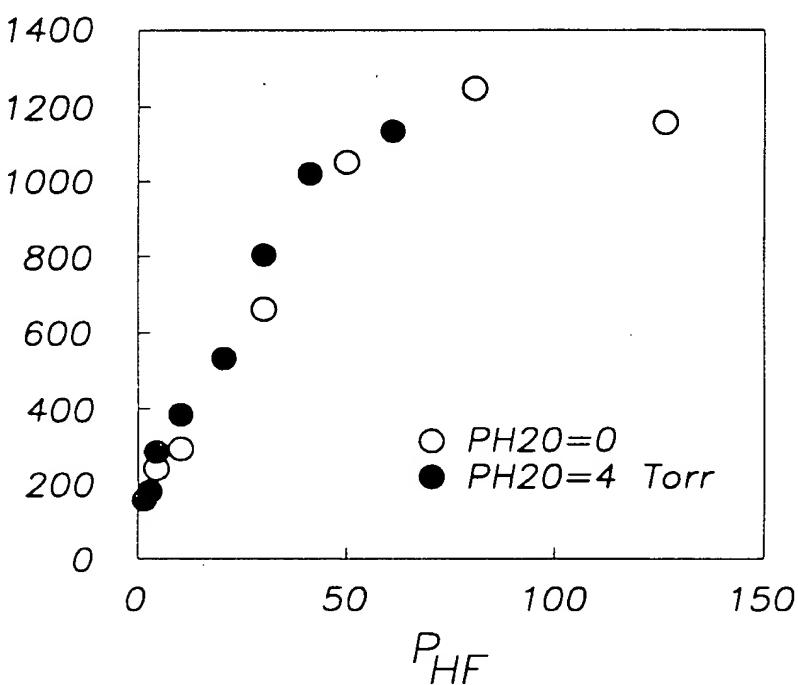
ETCH RATE  
( $\text{\AA}/\text{min.}$ )

FIG. 15

17/21

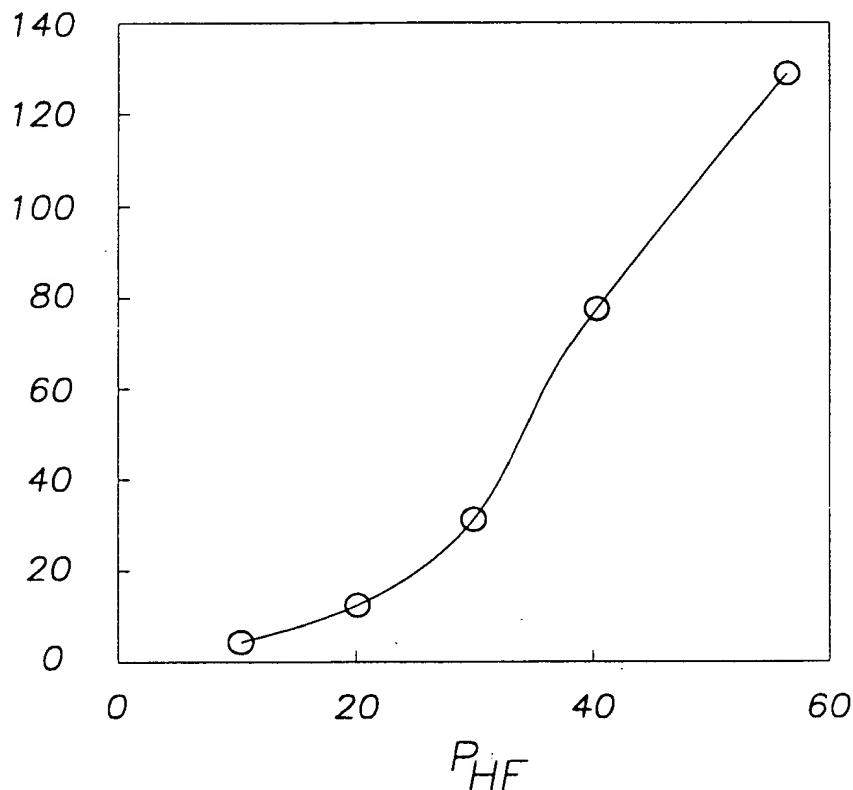
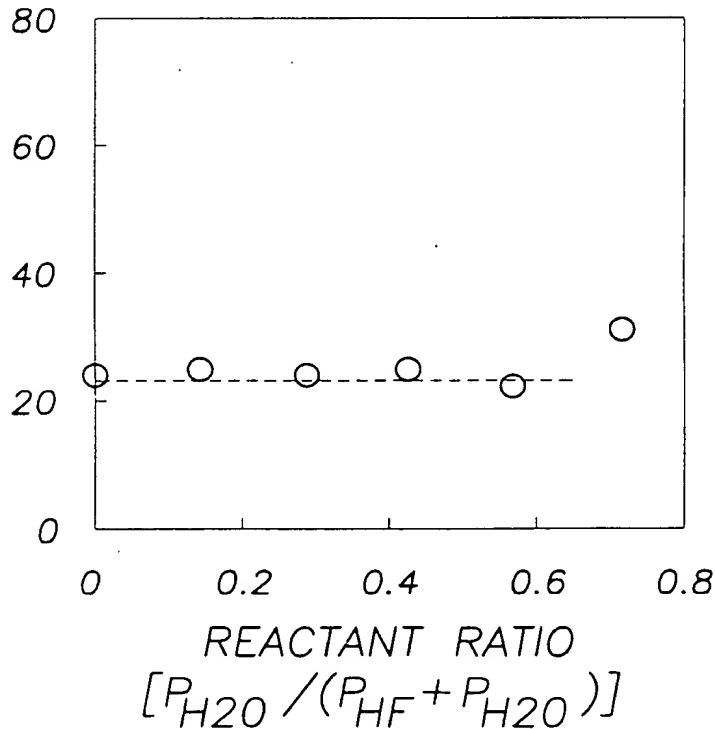
ETCH RATE  
(Å/min)

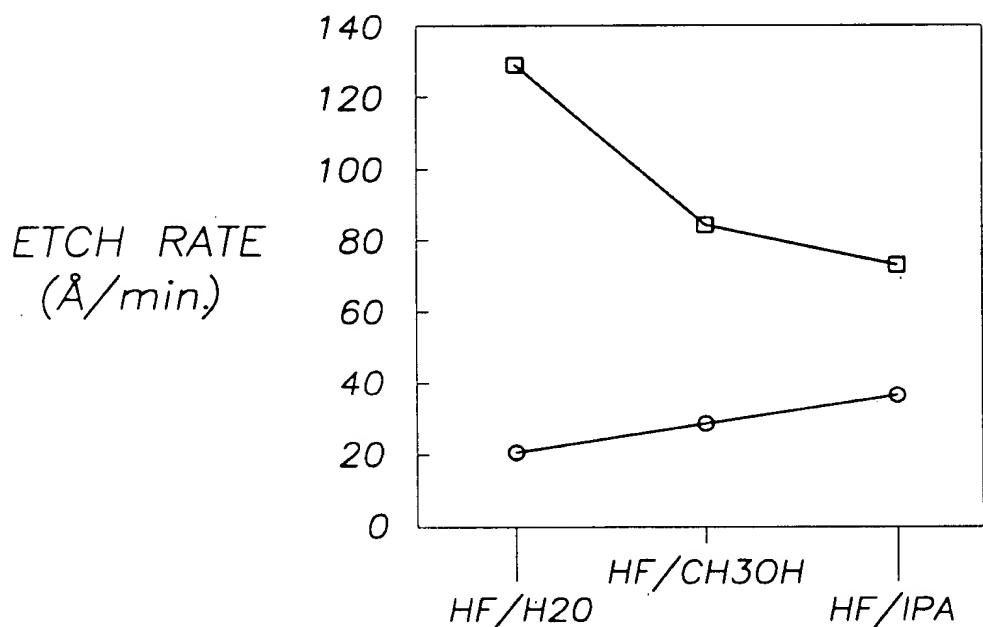
FIG. 16

ETCH RATE  
(Å/min)



18/21

FIG. 17

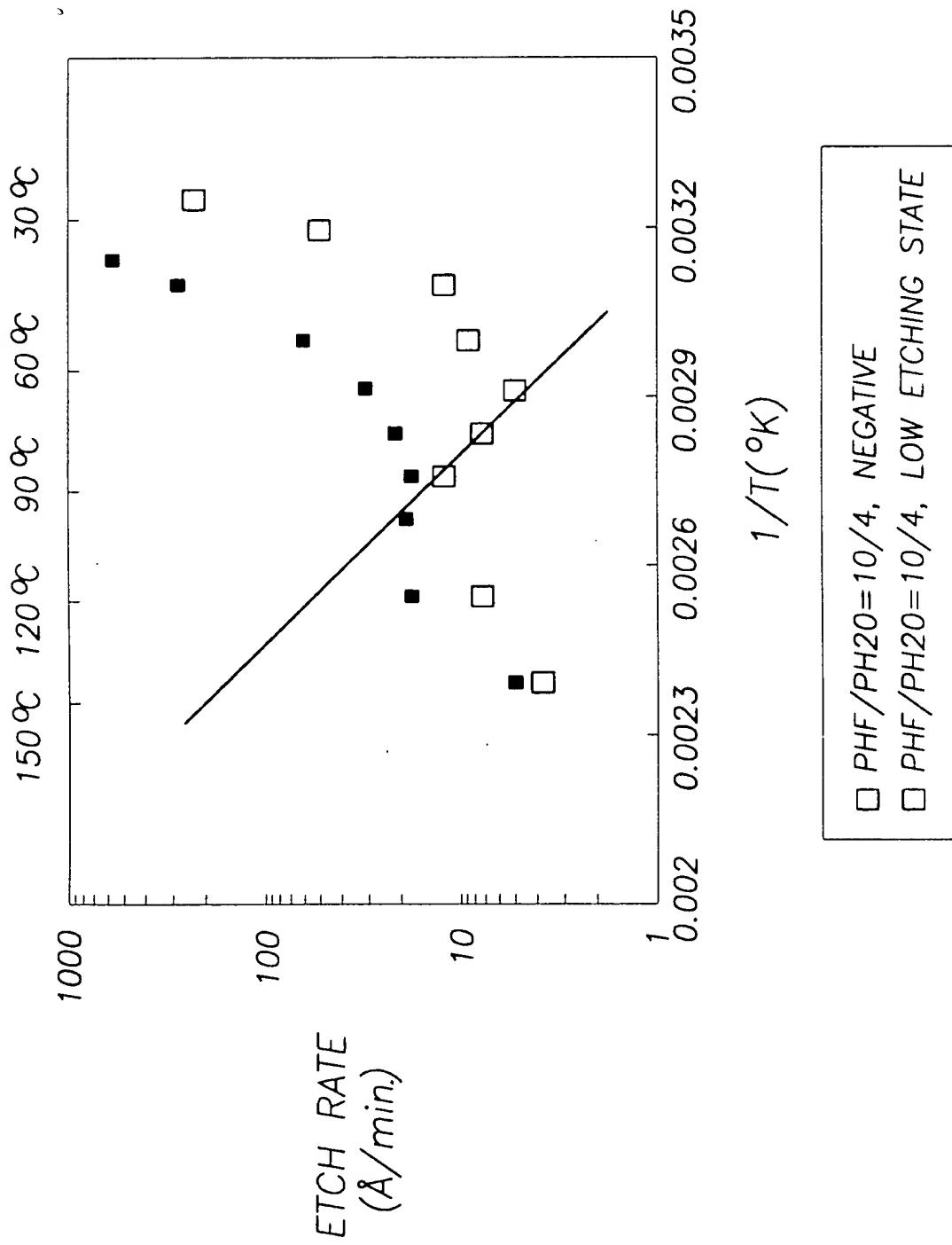


—○— NON-ACTIVATED ETCHING STATE  
—□— ACTIVATED ETCHING STATE

19/21



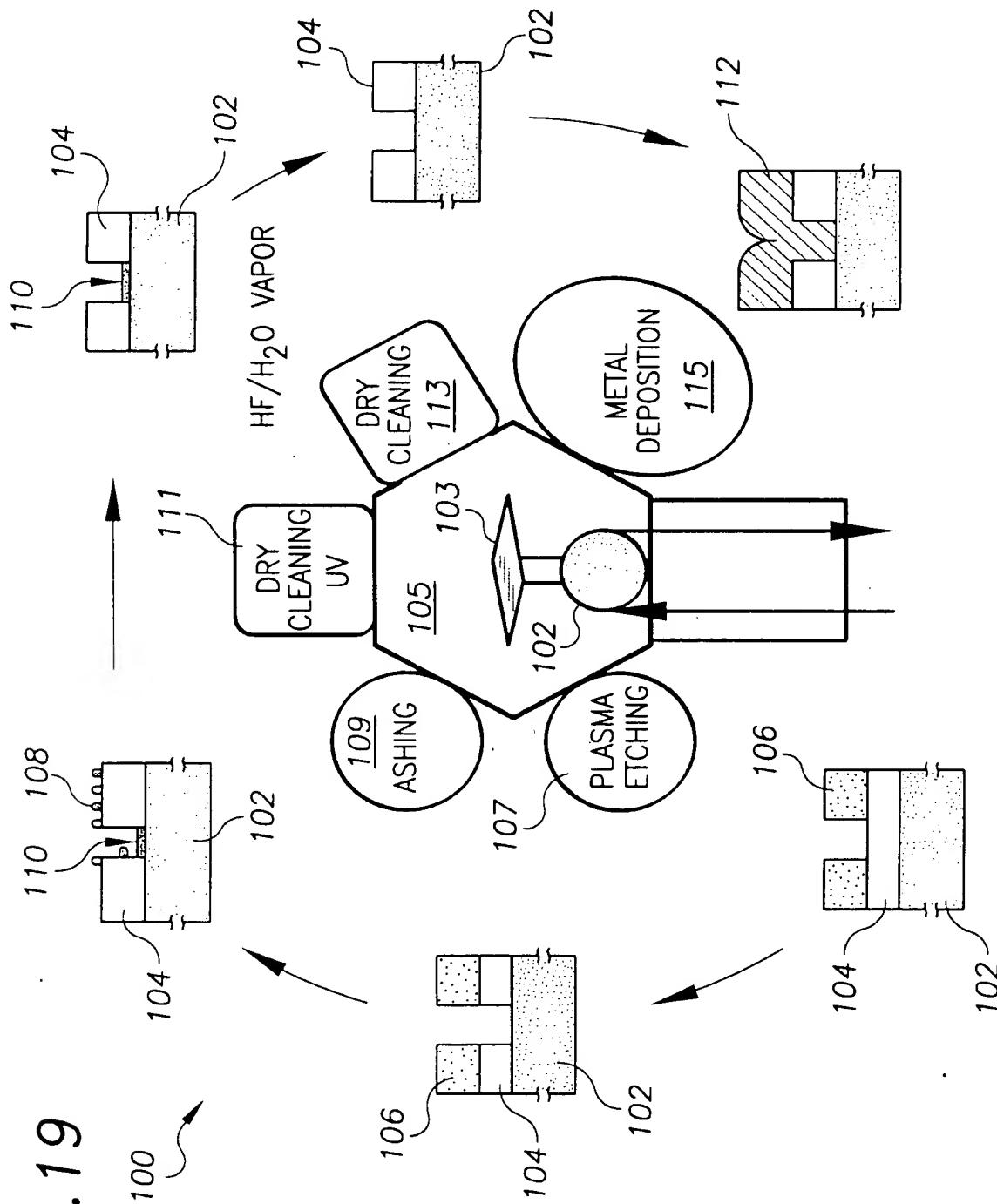
FIG. 18



20/21



FIG. 19



21/21

